

STATEMENT OF BASIS (AI No. 2055)

For draft Louisiana Pollutant Discharge Elimination System permit No. LA0110825 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Harcros Chemicals, Inc.
 St. Gabriel Facility
 3920 Highway 30
 St. Gabriel, Iberville Parish

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
 Office of Environmental Services
 Post Office Box 4313
 Baton Rouge, Louisiana 70821-4313

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DATE PREPARED: May 14, 2009

1. PERMIT STATUS

A. Reason For Permit Action: Renewal issuance of an Louisiana Pollutant Discharge Elimination System (LPDES) permit LA0110825 for a five year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46*.

- * In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX.Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

B. NPDES permit - NPDES permit effective date: N/A
 NPDES permit expiration date: N/A

* EPA has not retained enforcement authority*

C. LPDES permit - LPDES permit effective date: August 1, 2002
 LPDES permit expiration date: July 31, 2007

The LPDES permit was expired on July 31, 2007. The application was received on February 1, 2007; therefore, the permit was administratively continued. Additional information received on March 19, 2007.

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II. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY – Chemical Distributor

According to the application, the facility produces minor blends and dilutions. Other products are brought on-site in bulk, and repackaged into drums and totes. Industrial wastewater is used to clean containers and equipment and is collected separately and shipped off-site.

The discharges from this site include discharges of treated sanitary wastewater and stormwater runoff. In accordance with LAC 33:IX.2511.A.1.e., prior to October 1, 1994, discharges composed of entirely of stormwater shall not be required to obtain an LPDES permit except: a discharge which the state administrative authority determines to contribute to a violation of a water quality standard or is a significant contributor of pollutants to waters of the state.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: 1 - The complexity designation for SIC code 5169, Chemical Bulk Storage and Distribution was not listed in the LDEQ regulations, therefore Complexity Type 1 was applied.
3. Wastewater Type: III
4. SIC code: 5169

C. LOCATION – 3920 Highway 30, Iberville Parish Latitude 30°14' 59", Longitude 91°5' 6"

III. RECEIVING WATERS

STREAM – Bayou Braud thence to Spanish Lake

BASIN AND SEGMENT – Pontchartrain River Basin, Segment 040201

DESIGNATED USES -

- a. primary contact recreation
- b. secondary contact recreation
- c. propagation of fish and wildlife
- d. oyster propagation

IV. OUTFALL INFORMATION

Outfall 001

- A. Discharge Type: intermittent discharge of stormwater runoff
- B. Treatment: none
- C. Location: at the point of discharge located at the south end of the property where the unnamed ditch crosses under the rail spur prior to combining with other waters (Latitude 30°14' 52", Longitude 91° 5' 9")
- D. Flow: intermittent, estimated flow of 72,000 gallons per inch of rain
- E. Receiving Waters: discharges to an unnamed ditch along the main railroad tracks to Bayou Braud and thence to Spanish Lake

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F. Basin and Segment: Lake Pontchartrain Basin, Segment No. 040201

Outfall 003

A. Discharge Type: intermittent discharge of treated sanitary wastewater

B. Treatment: aerobic treatment system with chlorination

C. Location: at the point of discharge from the sanitary treatment plant located at the northeast corner of the property near the warehouse prior to combining with other waters (Latitude 30°15' 1", Longitude 91°5' 4")

D. Flow: intermittent flow of 500 GPD

E. Receiving Waters: from the outfall located at the north east side of the property to an unnamed ditch to a Louisiana Highway ditch, thence to Bayou Braud, and thence to Spanish Lake

F. Basin and Segment: Lake Pontchartrain Basin, Segment No. 040201

V. PROPOSED CHANGES FROM PREVIOUS PERMIT

Harcros Chemicals, Inc. has requested its sanitary sampling frequency to be reduced from semi-annual to annual. Harcros employees are catching quarterly samples along a snake infested ditch during or immediately after heavy rains. Based on the compliance history in Section VIII of the Statement of Basis, Harcros has exceedances of total suspended solids and exhibits noncompliance with its permit. Therefore, the request to reduce the monitoring frequency for treated sanitary wastewater from semi-annual to annual will not be granted.

In the current LPDES permit, Outfall 002 is considered an external outfall for stormwater runoff; however, the application indicates that Outfall 002 empties into a sump then pumped to Outfall 001. Therefore, Outfall 002 was deleted to only include Outfall 001 for stormwater runoff.

VI. PERMIT LIMIT RATIONALE

The following sections set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit.

Outfall 001 - intermittent discharge of stormwater runoff

Parameter	Monthly Average	Daily Maximum	Frequency	Sample Type
Flow	---	Report	1/quarter	Estimate
TOC	---	50 mg/L	1/quarter	Grab
Oil & Grease	---	15 mg/L	1/quarter	Grab
Chloride	Report	Report	1/quarter	Grab
Sulfate	Report	Report	1/quarter	Grab
pH	6.0 min.	9.0 max.	1/quarter	Grab

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Site-Specific Consideration(s)

Flow: established in accordance with LAC 33:IX.2707.1.1.b. These requirements have been retained from the administratively continued LPDES permit, effective August 1, 2002.

TOC: effluent limitations are consistent with current LDEQ stormwater guidance, current permitted facilities with similar operations and Best Professional Judgment (BPJ) at a frequency of 1/quarter. These requirements have been retained from the administratively continued LPDES permit, effective August 1, 2002.

Oil & Grease: effluent limitations are consistent with current LDEQ stormwater guidance, current permitted facilities with similar operations and Best Professional Judgment (BPJ) at a frequency of 1/quarter. These requirements have been retained from the administratively continued LPDES permit, effective August 1, 2002.

Chloride: effluent limitations are Best Professional Judgment (BPJ) at a frequency of 1/quarter. These requirements have been retained from the administratively continued LPDES permit, effective August 1, 2002.*

Sulfate: effluent limitations are Best Professional Judgment (BPJ) at a frequency of 1/quarter. These requirements have been retained from the administratively continued LPDES permit, effective August 1, 2002.*

pH: effluent limitations are established in accordance with LAC33:IX.1113.C.1 and shall be monitored at a frequency of 1/quarter. These requirements have been retained from the administratively continued LPDES permit, effective August 1, 2002.

* Chloride and Sulfate effluent limitations were established in the previous permit based on BPJ and chloride detections noted during a groundwater certification conducted at the site in 1992. Soil and groundwater samples were collected and determined that elevated concentrations of chlorides and sulfate exist in the subsurface soils in the vicinity of the New Bleach Production Area.

On June 11, 2007, DEQ requested Harcros Chemical to prepare a Risk Evaluation/Corrective Action Program (RECAP) to determine an acceptable chloride concentration for the site in an effort to receive No Further Action. The latest workplan dated April 22, 2009, was approved and noted the continuation of groundwater sampling for two wells. Additionally, Harcros is required to submit an Aquifer Characterization and Groundwater Sampling Work plan within sixty (60) days after completion of field activities.

Outfall 003 - intermittent discharge of treated sanitary wastewater

Parameter	Monthly Average	Weekly Average	Frequency	Sample Type
Flow	---	Report	1/ 6 months	Estimate
BOD ₅	---	45 mg/L	1/ 6 months	Grab
TSS	---	45 mg/L	1/ 6 months	Grab
Fecal Coliform	14 colonies/100ml	43 colonies/100ml	1/ 6 months	Grab
pH	6.0 min	9.0 max	1/6 months	Grab

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Site-Specific Consideration(s)

Flow: established in accordance with LAC 33:IX.2707.I.1.b. These requirements have been retained from the administratively continued LPDES permit, effective August 1, 2002.

BOD₅: effluent limitations are consistent with LPDES Class I Sanitary General Permit, LAG530000, and permitted facilities with similar operations at a frequency of 1/6 months. These requirements have been retained from the administratively continued LPDES permit, effective August 1, 2002.

TSS: effluent limitations are consistent with LPDES Class I Sanitary General Permit, LAG530000 and permitted facilities with similar operations at a frequency of 1/6 months. These requirements have been retained from the administratively continued LPDES permit, effective August 1, 2002.

Fecal Coliform: effluent limitations are consistent with LPDES Class I Sanitary General Permit, LAG530000 and permitted facilities with similar operations at a frequency of 1/6 months. These requirements have been retained from the administratively continued LPDES permit, effective August 1, 2002. Oyster propagation limits are applied.

pH: effluent limitations are established in accordance with LAC33:IX.1113.C.1 and shall be monitored at a frequency of 1/6 months. These requirements have been retained from the administratively continued LPDES permit, effective August 1, 2002.

VII. TMDL Waterbodies

Outfalls 001 and 003

The discharges include intermittent discharges of stormwater runoff from 001 and treated sanitary wastewater from Outfall 003 into an unnamed ditch to Bayou Braud and thence to Spanish Lake.

Subsegment 040201, Lake Pontchartrain Basin, is listed on LDEQ's Final 2006 303 (d) List as impaired for chlorides, organic enrichment/ low dissolved oxygen, sulfates, total dissolved solids, nitrogen, phosphorus, total ammonia, and pathogen indicators. To date, no TMDLs have been completed for this waterbody. The TMDL is projected to be completed by March 31, 2011. The point source discharges within this watershed were considered too far away and/or too small to directly impact the Bayou Manchac waterbody which is north of Bayou Braud.

LDEQ's position on nutrients, as supported by the ruling in *Sierra Club v. Givens*, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. LAC 33:IX.2707.D.1.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients, where the WQMP does not otherwise require specific nutrient limitations, is achieved by limiting the discharge of oxygen-demanding substances through a BOD₅ limitation. Compliance with the BOD₅ limitation as the indicator parameter will result in the control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Discharges in compliance with the standard sanitary limits applied in this permit should not cause or further contribute to the phosphorus, nitrogen, organic enrichment/low DO, pathogen indicators, or ammonia impairments. Discharges in compliance with the TOC limit should not cause or further contribute to the dissolved oxygen impairment. Chlorides, sulfates, and TDS impairments have been attributed to land clearance (land development/redevelopment). Limitations for these parameters shall not be included at this time.

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Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the chemical distributor point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit.

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to be established. TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

VIII. COMPLIANCE HISTORY/COMMENTS

Facility Information

Chemical Distributor

The facility produces minor blends and dilutions. Other products are brought on-site in bulk, and repackaged into drums and totes. Industrial wastewater is used to clean containers and equipment and is collected separately and shipped off-site. The discharges from this site include discharges of treated sanitary wastewater and stormwater runoff.

Compliance History

A review of the Discharge Monitoring Reports (DMRs) from 2002 to March 2009 revealed the following excursions:

Date	Parameter	Units	Permit Limit	Sample Measurement
01-06/07	BOD5	mg/L	45	104
07-12/05	TSS	mg/L	45	134
	Fecal Coliform	Col/100ml	400	1,450
01-06/05	Fecal Coliform	Col/100ml	400	<2,000
01-06/05	BOD5	mg/L	45	104
07-12/04	BOD5	mg/L	45	86.3
	TSS	mg/L	45	48.9
	Fecal Coliform	Col/100ml	400	>2,000
01-06/04	Fecal Coliform	Col/100ml	400	>2,000
01-06/03	Fecal Coliform	Col/100ml	400	>2,000
	TOC	mg/L	50	55.6
06-12/02	BOD5	mg/L	45	122
	TSS	mg/L	45	290
	Fecal Coliform	Col/100ml	400	>2,000

Spill/Release

January 27, 2009

A caller witnessed the discharge of chemicals (acids and basis) from tanks onto the ground that eventually drains into the sewer behind Harcros Chemicals. The wastewater storage tanks were inspected by two LDEQ inspectors and revealed that both tanks were within secondary containment. The facility manager stated the tanks are emptied by Global Industrial Solutions of New Iberia and transported to Harcros for treatment. Stormwater which collects within the burned areas is pH tested for compliance and discharged through the permitted outfall; otherwise it is pumped out

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by Global. Based on the inspection, there was no evidence of chemicals being improperly disposed of at the facility.

October 22, 2008

A release occurred at the sodium hypochlorite production vessel which lasted less than one minute. The release was caused by over chlorination when manufacturing sodium hypochlorite from sodium hydroxide and chlorine. According the operators present, all the valves to reactor tank three was blocked in as the batch was complete and the product transfer to storage tank was occurring. As part of the investigation, pressure tests were performed on the control valves and the secondary block valve. It was determined that the automatic control valve for reactor three failed to hold the pressure thus allowed product to leak to the reactor. The secondary block valve did pass the pressure test so the operator may not have fully closed the valve. The material released was one pound of chlorine that did not produce a visible cloud except at the immediate vicinity of the tank. The St. Gabriel Emergency Response/Fire Department arrived after the release and confirmed there was no cloud present and chlorine could not be detected outside the property.

**September 5, 2008 &
September 3, 2008**

A hurricane assessment was conducted on both dates, respectively. The assessment revealed the facility's barometric loop and the cooling tower was damaged and the conveyor belt that transports salt was damaged. New parts were ordered.

September 17, 2004

A facility representative was treating the wastewater by adding 10 lbs of sulfuric acid when a leak from the tank was noticed in a recently patched area. The tank was placed out of service and material was transferred to a rental tank.

October 6, 2003

Chlorine was transferred from a railcar and added into a tank of caustic soda to make bleach. The transfer valve was opened in excess of its normal operating range causing the release of a chlorine cloud. Off-site monitoring conducted by the facility exhibited no detectable levels of chlorine. The company failed to install control measures to prevent spill occurrence.

October 21, 2002

A contractor accidentally hit the tank valve open and spilled 450 gallons of washwater containing muriatic and sulfuric acids, with a pH of 1.9, onto the plant property. Spillage was neutralized with lime and the material was placed with a tank until disposed of off site.

REGULATION REVIEW

LAC33:IX.2511.A.1.e

Prior to October 1, 1994, discharges composed of entirely of stormwater shall not be required to obtain an LPDES permit except stormwater discharges that is determined by either the state administrative authority or the EPA regional administrator to contribute to a violation of a water quality standard or is determined to be a significant contributor of pollutants to waters of the state.

Rationale

Based on the facility's compliance history, the spills that have occurred on-site from 2002 through 2009 did not necessarily impact waters of the state but exhibit a potential for impact. Additionally, the facility has shown negligence by not implementing a proper Best Management Practice Plan (BMP) and/or Spill Prevention Control and Countermeasure (SPCC) Plan and not installing proper control measures to prevent unauthorized leaking or releasing of any substance.

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Rationale	Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283), 29, 31, 32 (except 323), 33, 344, 373; transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 are exempted from obtaining a permit. The current SIC code, 5169 is not defined under the stormwater discharge associated with industrial activity.
Conclusion	Based on the aforementioned compliance history, history of spills, inspection reports, and as allowed by LAC33:2511.A.1.e, it is determined that Harcros will be required to retain its permit.

IX. "IT" QUESTIONS - APPLICANT'S RESPONSES

This is a minor facility. IT questions were not required.

X. ENDANGERED SPECIES

The receiving waterbody, Subsegment 040201 of the Lake Pontchartrain Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

XI. HISTORIC SITES

The discharge is from an existing facility. Currently, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XII. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to permit the discharges described in the application.

XIII. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

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Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

XIV. STORMWATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

The SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. The plan should identify potential sources of stormwater pollution and ensure the implementation of practices to prevent and reduce pollutants in stormwater discharges associated with industrial activity at the facility.